

WE CLAIM:

1. A guide device for guiding at least one of a hole-forming tool and a fastener to a bone-repair device, comprising:

5 a coupling portion configured to be connected to the bone-repair device adjacent a bone; and

a guide portion connected to the coupling portion and configured to guide the at least one hole-forming tool and fastener into the bone and then to a predefined position of the bone-repair device.

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2. The guide device of claim 1, wherein the bone-repair device is a bone plate.

15 3. The guide device of claim 1, wherein the coupling portion is configured to be connected adjacent a first surface of the bone, and wherein the guide portion is configured to be disposed adjacent a second surface of the bone, the first and second surfaces being generally opposing on the bone.

20 4. The guide device of claim 1, wherein the bone-repair device includes an inner surface that faces the bone and an outer surface that opposes the inner surface, and wherein the guide portion is disposed closer to the inner surface than the outer surface.

5. The guide device of claim 1, wherein the predefined position is a threaded opening.

6. The guide device of claim 5, the threaded opening being a plurality of
5 threaded openings included in the bone-repair device, wherein the guide portion is configured to guide fasteners through the bone and then to each of the threaded openings.

7. The guide device of claim 1, wherein the guide portion includes a frame
10 and a guide element coupled movably to the frame, and wherein the guide element defines a guide axis intersecting the predefined position.

8. The guide device of claim 7, wherein the guide element is movable parallel to the guide axis.

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9. The guide device of claim 8, wherein the guide element includes indicia configured to measure a distance along the guide axis, and wherein the distance corresponds to a spacing of the bone-repair device from the guide element.

20 10. The guide device of claim 8, wherein the guide portion includes a detent mechanism configured to restrict movement of the guide element.

11. The guide device of claim 10, wherein the detent mechanism is configured to permit movement of the guide element toward the bone and to restrict movement of the guide element away from the bone.

5 12. The guide device of claim 7, wherein the bone-repair device includes a plurality of predefined positions, and wherein the guide element is movable to define spaced guide axes intersecting each of the predefined positions.

10 13. The guide device of claim 1, wherein the guide portion is configured to be movable into engagement with the bone so that the bone is pushed toward the bone-repair device.

15 14. The guide device of claim 1, further comprising a spacer portion connecting the coupling portion to the guide portion, the spacer portion being disposed external to the bone.

15. A guide device for guiding at least one of a hole-forming tool and a fastener to a connective feature of a bone-repair device, comprising:

a coupling portion configured to be connected to the bone-repair device adjacent a bone; and

5 a guide portion connected to the coupling portion and configured to be disposed in a predefined relation to the bone-repair device so that the guide portion defines a guide axis extending from the guide portion, through the bone, and then to the connective feature of the bone-repair device.

10 16. The guide device of claim 15, the connective feature being a plurality of connective features included in the bone-repair device, wherein the guide portion is configured to define a plurality of guide axes that intersect respective connective features.

15 17. The guide device of claim 16, wherein the guide portion includes a frame and a guide element movable within the frame to define the plurality of guide axes.

18. The guide device of claim 15, wherein the guide portion includes a guide element defining the guide axis, and wherein the guide element is configured to be 20 movable parallel to the guide axis while the coupling portion is connected to the bone.

19. The guide device of claim 18, wherein the guide portion includes a detent mechanism configured to restrict movement of the guide element.

20. The guide device of claim 19, wherein the detent mechanism is configured 5 to permit movement of the guide element toward the bone and to restrict movement of the guide element away from the bone.

21. The guide device of claim 19, wherein the detent mechanism is configured to be releasable manually without tools.

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22. The guide device of claim 15, wherein the guide portion includes a removable cannula defining the guide axis.

23. The guide device of claim 15, wherein the bone is a distal radius, and 15 wherein the bone-repair device is a bone plate configured to be connected adjacent a volar surface of the distal radius.

24. The guide device of claim 15, further comprising a spacer portion configured to connect the coupling and guide portions external to the bone.

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25. The guide device of claim 15, wherein the guide portion includes indicia configured to measure a distance along the guide axis.

26. The guide device of claim 25, wherein the distance corresponds to a spacing of the bone-repair device from the guide portion.

27. The guide device of claim 15, wherein the connective feature is a threaded 5 opening.

28. A system for fixing a bone, comprising:

a bone plate including a connective feature; and

a guide device configured to guide at least one of a hole-forming tool and a

10 fastener through the bone and then to the connective feature, including (1) a coupling portion configured to be connected to the bone plate, and (2) a guide portion connected to the coupling portion and configured to be disposed in a predefined relation to the bone plate so that the guide portion defines at least one guide axis intersecting the connective feature of the bone plate.

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29. The system of claim 28, wherein the bone plate defines an array of threaded openings, and wherein the at least one guide axis is a plurality of guide axes intersecting each of the threaded openings.

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30. The system of claim 28, wherein the bone plate defines at least one additional connective feature configured to position the coupling portion in relation to the bone plate.

31. The system of claim 28, wherein the bone plate and the guide device are configured in correspondence for use on one of a left and a right side of a body.

32. A method of connecting a bone plate to a bone, comprising:

5 defining, at least substantially external to the bone, a guide axis that extends through the bone; and

directing a bone screw along the guide axis, through the bone, and then into threaded engagement with an opening of the bone plate.

10 33. The method of claim 32, wherein the bone plate is connected adjacent a first surface of the bone, and wherein the step of defining is performed adjacent a second surface of the bone generally opposing the first surface.

34. The method of claim 32, wherein the step of defining includes a step of

15 connecting a guide device to the bone plate, the guide device defining the guide axis.

35. The method of claim 34, which further comprises the step of contacting the bone with the guide device to push the bone generally toward the bone plate.

36. The method of claim 32, wherein the step of directing includes steps of 1) forming a hole in the bone, and 2) inserting the bone screw into the hole.

37. The method of claim 32, the bone screw being a first bone screw and the 5 opening being a first opening, the method further comprising the step of placing a second bone screw through a second opening of the bone plate and then into the bone.

38. A method of repairing a bone with a bone-repair device, comprising:
connecting the bone-repair device to the bone;
10 connecting a guide element to the bone-repair device so that a portion of the bone is disposed between the guide element and the bone-repair device; and
placing a fastener into the portion of the bone and then into connection with the bone-repair device along a path defined by the guide element.

15 39. The method of claim 38, wherein the step of connecting a bone-repair device includes a step of connecting a bone plate to the bone.

40. The method of claim 38, wherein the bone-repair device includes a threaded opening, and wherein the step of connecting a guide element includes the 20 step of positioning the path defined by the guide element to intersect the threaded opening.

41. The method of claim 40, wherein the step of connecting a guide element to the bone-repair device is performed after the step of connecting a bone-repair device to the bone.

5 42. The method of claim 38, which further comprises contacting the bone with the guide element so that the bone is pushed toward the bone-repair device.

43. A system for repairing a bone, comprising:
means for defining, at least substantially external to the bone, a guide axis that
10 extends through the bone; and
means for directing a bone screw along the guide axis, through the bone, and then into threaded engagement with an opening of the bone plate.